

WHAT IS CLAIMED IS:

1. A dual camera module comprising two image modules attached to a flex interconnect.
2. A dual camera module recited in claim 1 wherein sharing control and data lines and at least one component on the flex interconnect.
3. The dual camera module recited in claim 1 wherein each of the image modules comprises a lens and a sensor.
4. The dual camera module recited in claim 1 wherein each of the image modules comprises a lens and a combination sensor-image processor.
5. The dual camera module recited in claim 1 wherein the first image module of the two image modules faces a first direction and the second image module of the two image modules faces a second direction.
6. The dual camera module recited in claim 1 wherein said each of the image modules are uniquely addressable
7. The dual camera module recited in claim 1 wherein said both of the image modules respond to a common or global address.
8. The dual camera module recited in claim 1 wherein said flex interconnect includes an Inter-IC (I2C) bus.
9. The dual camera module recited in claim 1 wherein said flex interconnect includes a Serial Peripheral Interface

(SPI).

10. The dual camera module recited in claim 1 wherein each of the image modules is programmed to respond to a unique I2C address.
11. The dual camera module recited in claim 1 wherein each of the image modules is programmed to respond to a common address.
12. The dual camera module recited in claim 1 wherein each of the image modules is configured to tri-state its output signals.
13. The dual camera module recited in claim 1 wherein a first image module captures images at a first resolution and a second image module captures images at a second resolution.
14. The dual camera module recited in claim 1 wherein a first image module captures images at a first orientation and a second image module captures images at a second orientation.
15. The dual camera module recited in claim 1 wherein a first image module captures images at a first color range and a second image module captures images at a second color range.
16. The dual camera module recited in claim 1 wherein a first image module captures images at a first focal length and a second image module captures images at a second focal length.

17. An electronic apparatus comprising:
a substrate;
a dual camera module connected to said substrate, said dual camera module adapted to capture images, the dual camera module comprising:
a first image module adapted to capture images in a first direction; and
a second image module adapted to capture images in a second direction.
18. The electronic apparatus recited in claim 17 wherein each of the image modules comprises a lens and a sensor.
19. The dual camera module recited in claim 17 wherein each of the image modules comprises a lens and a combination sensor-image processor.
20. The electronic apparatus recited in claim 17 wherein each of the image modules further comprises an imaging filter.
21. The electronic apparatus recited in claim 17 wherein the first direction and the second direction are opposite directions relative to each other.
22. The electronic apparatus recited in claim 17 wherein said flex interconnect includes an Inter-Integrated Circuit (I2C) bus.
23. The electronic apparatus recited in claim 17 wherein said flex interconnect includes a Serial Peripheral Interface (SPI).

24. The electronic apparatus recited in claim 23 wherein each of the image modules is programmed to respond to a unique I2C address.
25. The electronic apparatus recited in claim 23 wherein each of the image modules is programmed to respond to a unique slave select on the SPI bus.
26. The dual camera module recited in claim 17 wherein said both of the image modules respond to a common address.
27. The electronic apparatus recited in claim 17 further comprising a screen whereon the captured images are displayed.
28. The electronic apparatus recited in claim 17 further comprising a screen whereon a first captured image from the first image module is displayed simultaneously with a second captured image from the second image module.
29. The electronic apparatus recited in claim 17 wherein said first image module has a first focal length and said second image module has a second focal length.
30. The dual camera module recited in claim 17 wherein a first image module captures images at a first resolution and a second image module captures images at a second resolution.
31. An electronic apparatus comprising:
 - a substrate;
 - a first image module adapted to capture images mounted on a first side of said substrate;

a second image module adapted to capture images mounted on a second side of said substrate; and

a screen adapted to display images captured by said first image module and by said second image module.

32. The electronic apparatus recited in claim 31 further comprising a screen whereon the captured images are displayed.

33. The electronic apparatus recited in claim 31 wherein each of the image modules comprises a lens and a sensor.

34. The electronic apparatus recited in claim 31 wherein each of the image modules is a combination sensor and image processor.

35. The electronic apparatus recited in claim 31 wherein said first image module faces a first direction and said second image module faces a second direction.

36. A method of operating an electronic apparatus, said method comprising:

capturing a scene using a first image module for previewing the scene on a display; and

capturing, after the previewing, the scene using a second image module.

37. The method recited in claim 36 wherein the second image module captures the scene at a higher resolution than the first image module.

38. A method of operating an electronic apparatus, said method comprising capturing a scene using a first image

module and a second image module, the two image modules operating simultaneously and synchronously generating a composite image data stream.

39. The method recited in claim 38 wherein the composite image data stream is generated on a shared tri-state bus.